

Table 1. Availability of data sources in the participating countries

Area of pathology	Indicator (*)	Country						
		Austria	Bulgaria	Finland	Greece	Italy	Spain	Sweden
A. CARDIOVASCULAR DISEASE AND SURGERY	A1		v	v	v	v		
	A2			v	v	v		v
	A3		v	v	v	v	v	v
	A4			v		v		v
	A5		v	v	v	v	v	v
	A6			v				v
	A7			v				v
	A8			v				v
	A9		v	v	v	v	v	v
	A10			v			v	v
	A11			v				v
	A12		v	v				v
	A13		v	v		v		
	A14			v		v		
B. CANCER	B1			v	v	v	v	v
	B2			v	v	v	v	v
	B3			v	v	v	v	v
C. INFECTIOUS DISEASES	C1			v				
	C2			v			v	
	C3			v		v		
	C4			v				
	C5		v	v	v	v		
	C6		v	v	v		v	
D. OTHER CHRONIC DISEASES	D1		v	v		v	v	
	D2		v	v		v		
	D3		v	v		v		
	D4		v	v		v		v
	D5			v		v	v	v
	D6			v		v	v	v
	D7			v		v		v

(*) = To see table 2 for further details. Detailed indicator sheets are available on the webpage “Disease areas and indicators”.

Area of pathology	Indicator (*)	Country						
		Austria	Bulgaria	Finland	Greece	Italy	Spain	Sweden
E. ORTHOPAEDICS	E1		v	v		v		v
	E2			v		v		v
	E3		v	v		v	v	v
	E4			v		v		
	E5			v		v		
	E6			v		v		v
	E7			v		v		v
	E8							
	E9							
F. TRANSPLANTATIONS	F1			v		v		v
	F2			v			v	v
	F3			v		v	v	v
	F4			v				v
	F5			v		v	v	v
G. EMERGENCY	G1		v	v		v		
	G2		v	v		v		
	G3		v	v		v		
H. NEONATAL / MATERNAL	H1		v	v		v		v
	H2		v	v		v	v	v
	H3		v	v		v		
	H4		v	v		v		
	H5		v	v		v	v	v
I. MISCELLANEA	I1			v		v	v	
	I2			v				

(*) = To see table 2 for further details. Detailed indicator sheets are available on the webpage “Disease areas and indicators”.

Table 2. List of the 54 indicators

Category	N.	Indicator	P (*)	T (*)	Numerator	Denominator
A. CARDIOVASCULAR DISEASE AND SURGERY	A 1	Emergency readmission to hospital following treatment for a stroke	*	*	The number of emergency admissions within 0-27 days (inclusive), previous discharge from hospital following treatment for a stroke (excluding psychiatric and obstetric readmission episodes).	The number of discharges following treatment for a stroke, excluding those where discharge is coded as death.
	A 2	Death within 30 days of admission to hospital with a stroke	*	*	The number of emergency admissions for patients with a primary diagnosis of stroke (ICD 10 codes I61-I64) on admission, where the patient dies in hospital and after discharge between 0-29 days (inclusive) of admission.	The number of emergency admissions for patients of all ages with a primary diagnosis on admission of stroke (ICD 10 codes I61-I64).
	A 3	In-hospital deaths following Coronary Artery Bypass Graft (CABG) operation	*	*	The number of ordinary admissions with CABG where the patient dies in hospital (before the discharge).	The number of ordinary hospital admissions with CABG.
	A 4	Death within 30 days of Coronary Artery Bypass Graft (CABG) operation	*	*	The number of ordinary admissions with CABG where the patient dies in hospital or after discharge, between 0-29 days (inclusive) after the first eligible procedure.	The number of ordinary hospital admissions where CABG was performed.
	A 5	In-hospital deaths following Percutaneous Transluminal Coronary Angioplasty (PTCA) operation	*	*	The number of ordinary admissions with PTCA where the patient dies in hospital (before the discharge).	The number of ordinary hospital admissions with PTCA.
	A 6	Death within 30 days of Percutaneous Transluminal Coronary Angioplasty (PTCA) operation	*	*	The number of ordinary admissions with PTCA where the patient dies between 0-29 days (inclusive) of the procedure, included deaths in hospital and after discharge.	The number of ordinary hospital admissions with PTCA.
	A 7	Death within 6 months of Percutaneous Transluminal Coronary Angioplasty (PTCA) operation	*	*	The number of ordinary admissions with PTCA where the patient dies between 0-6 months (inclusive) of the procedure, included deaths in hospital and after discharge.	The number of ordinary hospital admissions with PTCA.
	A 8	Death within 12 months of Percutaneous Transluminal Coronary Angioplasty (PTCA) operation	*	*	The number of ordinary admissions with PTCA where the patient dies between 0-12 months (inclusive) of the procedure, included deaths in hospital and after discharge.	The number of ordinary hospital admissions with PTCA.
	A 9	In-hospital deaths following admission to hospital with Acute Myocardial Infarction (AMI)			The number of emergency admissions for patients aged over 18 with a primary diagnosis of AMI on admission, where the patient dies in hospital (before the discharge).	The number of emergency admissions for patients aged over 18, with a primary diagnosis of AMI.
	A 10	Death within 30 days of admission to hospital with an Acute Myocardial Infarction (AMI)	*	*	The number of emergency admissions for patients aged over 18 with a primary diagnosis of AMI on admission, where the patient dies in hospital and after discharge between 0-29 days (inclusive) of admission.	The number of emergency admissions for patients aged over 18 with a primary diagnosis of AMI.
	A 11	Death within 30 days of admission to hospital with Congestive Heart Failure (CHF)	*	*	The number of emergency admissions for patients aged over 18 with a primary diagnosis of CHF on admission, where the patient dies in hospital and after discharge between 0-29 days (inclusive) of admission.	The number of emergency admissions for patients aged over 18 with a primary diagnosis of CHF.
	A 12	Hospital admission for Congestive Heart Failure (CHF)	*		The number of ordinary admission episodes for patients aged over 18 with a primary diagnosis of CHF.	Resident population aged over 18.
	A 13	In-hospital deaths and neurological complications following carotid stenting procedures			The number of ordinary admissions with carotid stenting where the patient dies or has neurological complication in hospital (before the discharge).	The number of ordinary hospital admissions with carotid stenting.
	A 14	Deaths and neurological complications within 30 days from carotid stenting procedures			The number of ordinary admissions with carotid stenting where the patient dies or has neurological complications in hospital and after discharge between 0-29 days (inclusive) of admission.	The number of ordinary hospital admissions with carotid stenting.

(*) P = Population; T = Trust

Category	N.	Indicator	P (*)	T (*)	Numerator	Denominator
B. CANCER	B 1	Breast cancer relative survival	*		The observed five year survival rate of patients diagnosed with breast cancer.	The expected survival rate among a population with the same age structure.
	B 2	Lung cancer relative survival	*		The observed five year survival rate of patients diagnosed with lung cancer.	The expected survival rate among a population with the same age structure.
	B 3	Colon cancer relative survival	*		The observed five year survival rate of patients diagnosed with colon cancer.	The expected survival rate among a population with the same age structure.
C. INFECTIOUS DISEASES	C 1	Emergency admissions to hospital of children with lower respiratory infections	*		The number of emergency admissions of children aged under 16 with lower respiratory tract infections. (Primary diagnosis – ICD 10 codes: J10.0, J11.0, J11.1, J12.-, J13, J14, J15.-, J16.-, J18.0, J18.1, J18.9, J21.-).	Resident population aged under 16.
	C 2	AIDS survival	*		The observed 1/2/5 year survival rate of patients diagnosed with AIDS.	The expected survival rate among a population with the same age structure.
	C 3	Death within 30 days of admission to hospital with pneumonia	*	*	The number of admissions for patients with a primary diagnosis of pneumonia where the patient dies in hospital and after discharge between 0-29 days (inclusive) of admission.	The number of admissions for patients of all ages with a primary diagnosis of pneumonia.
	C 4	Hospital admissions for paediatric gastroenteritis	*		The number of ordinary admission episodes for children aged under 18 diagnosed with paediatric gastroenteritis.	Resident population aged under 18.
	C 5	Hospital admissions for influenza	*		The number of ordinary admission episodes for patients diagnosed with influenza.	Resident population.
	C 6	Hospital admissions for tuberculosis	*		The number of ordinary admission episodes for patients diagnosed with tuberculosis.	Resident population.
D. OTHER CHRONIC DISEASES	D 1	Hospital admissions for uncontrolled diabetes	*		The number of ordinary admission episodes for patients aged over 18 diagnosed with uncontrolled diabetes.	Resident population aged over 18.
	D 2	Hospital admissions for short term complications of diabetes	*		The number of ordinary admission episodes for patients aged over 18 diagnosed with short term complications of diabetes.	Resident population aged over 18.
	D 3	Hospital admissions for long term complications of diabetes	*		The number of ordinary admission episodes for patients aged over 18 diagnosed with long term complications of diabetes.	Resident population aged over 18.
	D 4	Hospital admissions for lower extremity amputations in patients with diabetes	*		The number of ordinary admission episodes for lower extremity amputations in patients aged over 18 with diabetes.	Resident population aged over 18.
	D 5	Hospital admissions for adult asthma	*		Discharged patients aged over 18 and under 65 with ICD-9-CM principal diagnosis codes for asthma. Patients with any diagnosis code of cystic fibrosis and anomalies of the respiratory system, transferring from another institution, or Major Diagnostic Category (MDC) 14 (pregnancy, childbirth, and puerperium) are excluded.	Population aged over 18 and under 65 in a selected area or country.
	D 6	Hospital admissions for paediatric asthma	*		Discharged patients aged under 18 years with ICD-9-CM principal diagnosis codes for asthma. Patients with any diagnosis code of cystic fibrosis and anomalies of the respiratory system, transferring from another institution, or Major Diagnostic Category (MDC) 14 (pregnancy, childbirth, and puerperium) are excluded.	Population aged under 18 in a selected area or country.
	D 7	Hospital admissions for senile asthma	*		Discharged patients aged 65 years and older with principal diagnosis codes for asthma. Patients with any diagnosis code of cystic fibrosis and anomalies of the respiratory system, transferring from another institution, or Major Diagnostic Category (MDC) 14 (pregnancy, childbirth, and puerperium) are excluded.	Population aged 65 years and older in selected area or country.

(*) P = Population; T = Trust

Category	N.	Indicator	P (*)	T (*)	Numerator	Denominator
E. ORTHOPAEDICS	E 1	Emergency readmission to hospital following treatment for a fractured hip	*	*	The number of emergency admissions within 0-27 days (inclusive), previous discharge from hospital (excluding psychiatric and obstetric readmission episodes).	The number of discharges excluding those coded under mental health and obstetric specialities and those where discharge is coded as death.
	E 2	Death within 30 days of admission to hospital with a fractured hip	*	*	The number of emergency admissions for patients aged 65 years and over with a primary diagnosis on admission of fractured proximal femur (ICD 10 codes S72.0, S72.1 and S72.2) where the patient dies in hospital and after discharge between 0-29 days (inclusive) of admission.	The number of emergency admissions for patients aged 65 years and over with a primary diagnosis on admission of fractured proximal femur (ICD 10 codes S72.0, S72.1 and S72.2).
	E 3	In-hospital death following admission with a fractured hip			The number of emergency admissions for patients aged 65 years and over with a primary diagnosis on admission of fractured proximal femur (ICD 10 codes S72.0, S72.1 and S72.2) where the patient dies in hospital (before the discharge).	The number of emergency admissions for patients aged 65 years and over with a primary diagnosis on admission of fractured proximal femur (ICD 10 codes S72.0, S72.1 and S72.2).
	E 4	Returning home following hospital treatment for fractured hip		*	The number of emergency admissions for patients aged 65 years and over with a primary diagnosis on admission of fractured proximal femur (ICD 10 codes S72.0, S72.1 and S72.2 – see denominator data) where the patient is discharged to the pre-admission category of accommodation between 0 and 27 days (inclusive) of admission.	The number of emergency admissions for patients aged 65 years and over with a primary diagnosis on admission of fractured proximal femur (ICD 10 codes S72.0, S72.1 and S72.2). The denominator excludes admissions where the first episode has an admission source coded other than 19, 29, 30, 37, 38, 48, 50, 54, 65, 66, 69, 84, 85, 86, 88, 89.
	E 5	In-hospital waiting time for femur fracture surgery		*	The number of patients aged 65 and over admitted to the hospital with a diagnosis of upper femur fracture with surgery initiated within 48 hours.	The number of patients aged 65 and over admitted to the hospital with a diagnosis of upper femur fracture.
	E 6	Total hip replacement in-hospital mortality rate		*	The number of in-hospital deaths with a code of total hip replacement in any procedure field (ICD-9-CM procedure code: 81.51 total hip replacement).	All discharges with a procedure code of total hip replacement in any field (ICD-9-CM procedure code: 81.51 total hip replacement).
	E 7	Partial hip replacement in-hospital mortality rate		*	The number of in-hospital deaths with a code of partial hip replacement in any procedure field (ICD-9-CM procedure code: 81.52 partial hip replacement).	All discharges with a procedure code of partial hip replacement in any field (ICD-9-CM procedure code: 81.52 partial hip replacement).
	E 8	Revision rate			Number of revisions (= exchange or removal of at least a part of the implant) at follow-up period X.	Total number of primary implantations included in the evaluation sample.
	E 9	Revision burden rate			Number of revisions (= exchange or removal of at least a part of the implant) in a period.	Number of all operations (primary and revision).
F. TRANSPLANTATIONS	F 1	Medulla ossium graft relative survival	*	*	The five year survival rate of patients after the medulla ossium graft transplantation procedure.	The expected survival rate among a population with the same age structure.
	F 2	Liver transplantation relative survival	*	*	The five year survival rate of patients after the liver transplantation procedure.	The expected survival rate among a population with the same age structure.
	F 3	Heart transplantation relative survival	*	*	The five year survival rate of patients after the heart transplantation procedure.	The expected survival rate among a population with the same age structure.
	F 4	Lung transplantation relative survival	*	*	The five year survival rate of patients after the lung transplantation procedure.	The expected survival rate among a population with the same age structure.
	F 5	Kidney transplantation relative survival	*	*	The five year survival rate of patients after the kidney transplantation procedure.	The expected survival rate among a population with the same age structure.

(*) P = Population; T = Trust

Category	N.	Indicator	P (*)	T (*)	Numerator	Denominator
G. EMERGENCY	G 1	Emergency admission to hospital	*		The number of emergency admissions to hospital.	Population resident in a selected area or country.
	G 2	Emergency readmissions to hospital within 28 days	*	*	The number of emergency admissions within 0-27 days (inclusive), previous discharge from hospital. The readmission where the patient dies is included, but patients with any mention of a cancer diagnosis or chemotherapy for cancer, or Major Diagnostic Category (MDC) 14 (pregnancy, childbirth, and puerperium), or mental health specialties are excluded. Day cases are also excluded.	The number of discharges from every hospital. The following cases are excluded from the calculation of the denominator: - patients discharged as deceased;- day cases;- patients discharged with mention of mental health;- patients discharged with any mention of cancer or cancer related pathologies or treatment;- patients discharged with Major Diagnostic Category (MDC) 14 (pregnancy, childbirth, and puerperium).
	G 3	Emergency hospital admissions for alcohol related pathologies		*	The number of emergency admission episodes for patients with principal and secondary diagnosis for alcohol related pathologies (ICD9-CM 291;303;305.0;357.5;425.5;535.3).	Resident population.
H. NEONATAL/MATERNAL	H 1	Maternal mortality rate	*		The number of deaths of women while pregnant or within 42 days of termination of pregnancy.	Number of live births in year of analysis.
	H 2	Neonatal / Infant mortality rate	*		The number of children dying under 28 days / one year of age.	The number of live births.
	H 3	Perinatal mortality rate	*		The number of perinatal deaths. The perinatal period starts as the beginning of foetal viability (28 weeks gestation or 1,000g) and ends at the end of the 7 th day after delivery. Perinatal deaths are the sum of stillbirths plus early neonatal deaths.	The number of live or death births.
	H 4	Perinatal intensive care mortality rate		*	The number of perinatal deaths admitted in intensive care unit. The perinatal period starts as the beginning of foetal viability (28 weeks gestation or 1,000g) and ends at the end of the 7 th day after delivery. Perinatal deaths are the sum of stillbirths plus early neonatal deaths.	The number of live or death births.
	H 5	Percentage of births carried out by caesarean section	*	*	The number of births carried out by caesarean section.	The number of births.
I. MISCELLANEA	I 1	Death within 30 days of surgery (elective and non-elective admissions)	*	*	The number of discharges with elective/non-elective admission records where the patient dies between 0 - 29 days (inclusive) of the first procedure while hospitalized.	The number of discharges records with elective/non-elective admissions, where an eligible operative procedure was performed. Day cases are excluded.
	I 2	Hospital admissions for alcohol related pathologies		*	The number of ordinary admission episodes for patients with principal and secondary diagnosis for alcohol related pathologies (ICD9-CM 291; 303;305.0;357.5;425.5;535.3).	Resident population.

(*) P= Population; T=Trust